FROM ARMSTRONG, WESTERMAN

(FRI) 1. 17' 03 17:29/ST. 17:28/NO. 4864272876 P 1

Atty. Docket: 000152

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Zenoviy TKACHUK

Serial Number: 09/534,509

Filed: March 24, 2000

Group Art Unit: 1633

Examiner: Chen, L. For: COMPOUND, COMPOSITION AND METHOD FOR THE

TREATMENT OF INFLAMMATORY AND INFLAMMATORY-

RELATED DISORDERS

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents Washington, D.C. 20231

Sir:

- I, Dr. Zenoviy TKACHUK, a citizen of UKRAINE, hereby declare and state:
- 1. I am the named inventor in the present application Serial No. 09/534,509 filed on March 24, 2000.
- 2. The experimental results provided in Example 2 of my application establish that the anti-inflammatory action of yeast RNA product in in vitro thrombocyte aggregation model is considerably improved when the yeast RNA is prepared having higher nitrogen and/or phosphorus content (see Table 4 on page 31 of the specification).
- 3. This declaration is submitted to illustrate and confirm this report with experimental results using in vivo model showing that preparing yeast RNA having increased phosphorus and/or nitrogen content greatly improves the anti-inflammatory action of yeast RNA.

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4. Influence of yeast RNA on local inflammation of mice legs

Various Yeast RNA products (RNA-P, RNA-F) were prepared in accordance with the method described in Example 1.1 of my application (see page 26 of the specification).

Specifically, the nitrogen and phosphorus contents were as follows (% are by weight):

RNA-P: 15.49% mitrogen and 9.05% phosphorus

RNA-F: 14.16% nitrogen and 8.2% phosphorus (see Table 1 on page 27 of the specification).

Next, experiments were conducted using the <u>in</u> <u>vivo</u> local inflammation model in mice, as described in Example 4.1 of my application (see pages 34-35 of the specification).

The experimental results are shown below (in the same format as Table 5 on page 35 of the specification).

Table 5-1: Influence of yeast RNA, concentration 10 mg/ml,

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on	TOCAT	inflammation	QΙ	ರಿವರಣ	תת	mice	

Contr.+PS	Contr.+LPS	Aspirin	RNA-P	RNA-F
0	43.31	35.5	20.1	29.1
	+ 2.43	+ 2.8	+ 2.09	+2.47
% of		18.03%	53.5%	32.8%
inhibition				
		P<0.001	P<0.001	P<0.001

5. As shown in Table 5-1, RNA-F, obtained by a common method and having relatively low nitrogen and/or phosphorus content, was considerably less active to inhibit the inflammatory process (32.8%) than RNA-P having relatively high nitrogen and/or phosphorus content (53.5%, i.e., an improvement of more than 50%).

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- 6. The experimental results obtained in this in vivo model are similar to the results in the model of aggregation of thrombocytes induced by arachidonic acid in Example 2 of my application, which also show considerable increase by about 50% aggregation parameter between RNA-F (M=57.90at 0.1% concentration) and RNA-P(M-84.09 at 0.1% concentration).
- 7. The experimental results obtained in this in vivo are also consistent with the experimental result of 47.17% inhibition with RNA-D at 10 mg/ml Concentration, as reported in Example 4.1 OF application (see Table 5 on page 35 φ£ specification). RNA-D contains 15.16% nitrogen and 8.6% phosphorus (see Table 1 on page 27 of specification).
- In conclusion, the present experimental report confirms that yeast RNA having a higher nitrogen and/or phosphorus content above 14.5% and 8.5% by weight, respectively, is considerably more effective against inflammatory processes, as shown by conventional in vitro as well as in vivo experiments.

The undersigned declares that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that willful false statements may jcopardize the validity of the application or any patent issued thereon.

Signed this <u>03</u> day of <u>jan</u>, 2003

Zenoviy TKACHUK